

National DNA Data Bank Advisory Committee Annual Report 2005-2006



May 2006

Stockwell Day, P.C., M.P., Minister of
Public Safety and Emergency
Preparedness officiating at the National
DNA Data Bank as it surpasses 5,000 Hits
in matching Crime Scenes to Convicted
Offenders.





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Message from the National DNA Data Bank Advisory Committee

During 2005/2006, the National DNA Data Bank Advisory Committee (AC) has met on three occasions. The first meeting in Toronto in October provided the members with an opportunity to meet with the Biology staff at the Centre of Forensic Science (CFS) as well as with the distinguished members of the CFS Advisory Committee. The meeting provided an appropriate forum to discuss DNA casework challenges and successes as well as National DNA Data Bank (NDDB) operations with the staff and the CSF Advisory Committee. Ontario is the largest contributor to the NDDB, its submissions accounting for some 45% of the profiles in the Convicted Offender Index (COI). The RCMP Contract Provinces and the Province of Québec contribute 38% and 17%, respectively. Profiles uploaded to the Crime Scene Index (CSI) are divided more evenly at 41% (CSF Toronto), 30% (LSJML Montreal) and 29% (six RCMP Regional Forensic Laboratories). As of July 2006, there are approximately 98,000 profiles in the COI and 30,000 profiles in the CSI, an increase of approximately 33,000 profiles since last year's report. More than 5,400 matches between the COI and the CSI have been reported to date and the match rate continues to rise in concert with the growth of the two Indices.

The contribution rate to the COI following convictions for Primary Offences, i.e., less than 50%, was the source of considerable discussion at the joint meeting in Toronto. However, following an update on Bill C-13 from Mr. G. Yost, Department of Justice (DOJ), there was agreement that the provisions of Bill C-13, which adds some 176 offences to the designated lists and provides for a more effective process for sample collection following convictions, may improve the contribution rate. There was however, general concern expressed by all participants over the lack of samples entering the NDDB and a potential link to justice and judicial understanding of the NDDB and its associated legislation, which is clearly very complex. The AC believes that ongoing education is paramount to ensure that the NDDB reaches its full potential in order to maximize convictions, eliminations and exonerations. Following a proposal from the joint meeting, AC Member, the Hon. Peter Cory, volunteered to correspond with Chief Justices and Chief Judges across Canada. In his letter, he outlined the less than favorable contribution rate following convictions and its consequences to the Justice System and offered the assistance of the AC to assist with presentations at appropriate Judicial conferences and meetings. Positive replies were received from across Canada. The AC has since made a presentation in BC and is scheduled to attend a Judicial Conference in Nova Scotia this Fall. In addition, Dr. Fourney, Oi/c NDDB and Mr. D. Bird, RCMP Legal Counsel, have made numerous presentations on behalf of the AC to various judicial conferences over the past several years.

Members of the CSF Biology Section also expressed their support for the provision in Bill C-13 which provides procedures for processing moderate matches. As well, they and the CSF Advisory Committee expressed their positive support for the ongoing operational quality and management of the NDDB.

Private Laboratories

During the October meeting, the AC was asked to review the potential role that independent or "Private" laboratories may have in populating the Canadian CSI in the NDDB.

As background, in the United States (US), there has been interest by some police agencies in using independent commercial laboratories to conduct special DNA testing on evidence and the

subsequent need to load the developed DNA profiles into the US National CSI. The data repository of the CSI and COI of the NDDB as well as the matching process is managed through the use of a special encrypted software package called CODIS (Combined DNA Index System). CODIS is owned by the US DOJ and is provided to law enforcement agencies within the US and throughout the world by the FBI. The RCMP received CODIS from the FBI by agreement for its use in the NDDB of Canada. Access to the Canadian NDDB CODIS data bank and its CSI can only be made through a recognized forensic laboratory of the RCMP, Province of Ontario or Province of Quebec. Canadian CODIS access is controlled by the NDDB. The NDDB also provides training on the use of CODIS as well as maintenance and upgrades to the system as part of its national service mandate. Also noted is that international requests for assistance of the NDDB are made through the International DNA Data Sharing Agreements with Interpol.

In the US, law enforcement use of DNA for forensic applications is governed through the guidance and recommendations of the (US) Scientific Working Group on DNA Analysis Methods (SWGDAM). This committee is composed of representatives of each state and federal forensic laboratory as well as members from Canada. The AC reviewed the position of SWGDAM regarding private laboratories' access to CODIS and quality review of outsourced DNA data. Dr. Tom Callaghan, CODIS Unit Chief at the FBI Laboratories explained to the AC how this topic was discussed at the last SWGDAM meeting and that SWGDAM reaffirms that:

- 1) Direct access to CODIS must remain solely within the law enforcement forensic DNA laboratories, and
- 2) 100% of outsourced DNA data must be technically reviewed by a National DNA Index System (NDIS) participating laboratory prior to CODIS entry in accordance with the NDIS procedures.

Dr. Callaghan informed the AC about the process in the FBI. They have recently modified the review of outsourced offender samples. The outsourcing NDIS laboratories who will upload the data are responsible and accountable for the DNA Data. They must conduct a technical and quality review of outsourced labs that comply with government requirements and agreements and they must demonstrate their compliance with the quality assurance standards by having an external audit with a copy of the applicable file in the laboratory that uploads the sample data. The information can only be shared with another participating lab under the same requirements.

The challenges of working responsibly with an outsourced laboratory do not diminish the accountability for the CODIS laboratory submitting the sample into CODIS. Any outsourcing involvement by the CODIS laboratory should take into account the additional time and support needed to conduct a sample review before the data are uploaded into CODIS.

The AC endorses the recommendations of SWGDAM regarding access to the Canadian CSI housed within the NDDB. Specifically: 1) That direct access to CODIS by Canadian forensic laboratories must remain solely with the recognized law enforcement related forensic laboratories that are associated with the Provinces of Quebec and Ontario, and the Government of Canada through the RCMP, and 2) That 100% of all outsourced DNA data analysis must be technically reviewed by the provincial or federal participating laboratories prior to any CODIS entry into the National CSI that is maintained in the NDDB of Canada in accordance with the FBI protocol for CODIS access.

Parliamentary Review of the National DNA Data Bank Legislation

In response to a request by the DOJ, the Committee met in early December 2005 to discuss a response to a draft consultation document entitled Parliamentary Review of the DNA Data Bank Legislation, prepared by officials from DOJ, Public Security and Emergency Preparedness Canada (PSEPC), the RCMP and the NDDB. The paper was a compilation of information and issues that may be of interest to Parliament as required by the upcoming legislated five-year review. The AC was asked to review and provide comments which could serve as advice/ recommendations to the Commissioner and the noted departments during the five-year parliamentary review.

The following is an outline of the questions and comments provided by the AC.

“At the outset the AC recognizes the importance of its role as an independent AC. In the course of our work, we the AC recognizes the importance of the principles of privacy which are so important to all Canadians and, as well, the efficient and fair use of the powerful investigative tool provided by the NDDB of Canada in the resolution of criminal offenses.”

- **Q. Should any changes be made in the DNA Identification Act, the regulations or the procedures of the NDDB with respect to safeguarding the privacy of individuals?**
 - **A.** The AC is satisfied with the NDDB policies and procedures to protect privacy interests of Canadians. The AC sees no reason to amend the Act, regulations, or procedures at this time. However, a privacy compliance review might be considered given the five-year review and expanding scope of the legislation and DNA collections. This issue will be closely monitored by the AC. The AC has since learned that a Privacy Audit is the appropriate vehicle to utilize in an existing program and an effective means to evaluate modifications being proposed to the process and the organization of the NDDB.

- **Q. Should the NDDB continue to be part of the Forensic Laboratory Services, the National Police Services (NPS) or as part of the RCMP, or should it exist as an independent entity?**
 - **A.** The AC understands that prior to initiation of the NDDB, it was the consensus from Parliament that the NDDB should be aligned in a secure organization which provides security and integrity of the data while insuring the privacy of the information. The Commissioner of the RCMP was tasked with the implementation and operations of the data bank. He is also responsible for operating other vital NPS such as the National Fingerprint and Criminal Records repositories, both of which require similar attention to security and privacy. The merits of alternative organizational models should be assessed against several criteria including preserving the integrity and security of the NDDB, maintaining the functional independence of the NDDB (viewed as separate from forensic or police criminal investigations) and safeguarding the privacy interests of the DNA data and convicted offender samples. The NDDB is a national service, and the AC therefore recommends that its operations and data be aligned with similar National Police investigative support institutions within the Information and Identification Services, i.e., Fingerprint and Criminal Records, which are currently housed within NPS but remain distinct from the forensic operational services provided by Forensic Laboratory Services to contracting provinces.

- Q. Should the AC be continued?**
- A. The AC feels that it would be inappropriate for it to comment about its continued existence.
- Q. If continued should the membership of the AC be changed?**
- A. The AC feels that it would be inappropriate for it to comment about its composition and membership.
- Q. Should the AC have a different set of responsibilities or mandate?**
- A. The AC is comfortable with the current charges and set of mandates. Should the functions of the NDDB be expanded or altered this can be revisited pursuant to its mandate.
- Q. Should any changes be made in the retroactive provisions of the DNA scheme?**
- A. The AC believes that retroactive schemes are legislative decisions which should be decided by Parliament. While the present retroactive scheme is complex, the current provisions appear to be appropriate. The AC is aware that other jurisdictions have vastly different and sometimes much more expansive statutes regarding retroactive DNA collections. The AC notes that the Supreme Court upheld the retroactive scheme in *R. v. Rodgers* (2006).
- Q. Should the DNA Warrant scheme be restricted to “designated offences?”**
- A. See below.
- Q. Given that society has an interest in investigation and solving all criminal offences, should the CSI contain profiles from all crime scenes?**
- A. The AC believes that the CSI should be expanded to include DNA Profiles from all indictable offences when available.
- Q. What criteria, if any, should govern the placement of offences on either list?**
- A. When the DNA Identification Act first came into force, it was clear that the criteria for categorizing offences within the Primary category related to violence and sexually oriented offences. Following the amendments approved in Bill C-13, it is difficult to identify such clearly defined criteria for primary offences. The present system is complex and difficult. As well, the international community is moving toward the inclusion of all serious offences as qualifiers for DNA sampling. The AC would therefore recommend that there should be no separate listing of primary and secondary offences. Rather, since indictable offences are considered serious, a designated offence should include all indictable and hybrid offences whether prosecuted by indictment or summary conviction, as is the case with fingerprinting.

The AC is also of the opinion that in the case of adults DNA sampling following conviction should no longer require judicial discretion. Rather, it should be mandatory so that the DNA collection process would be automatically undertaken following conviction. In the case of youthful offenders, the AC is of the opinion that judicial discretion should be retained in view of Canada's long-standing approach to the handling of young offenders within the justice system.

The AC notes that there is a lack of symmetry between the warrant provisions and the data bank provisions. The AC recommends that consideration be given to ensure agreement between these procedures by including all designated offences in both systems.

- Q. Should any offences be added to or deleted from any of the lists or moved from one list to the other?**
- A. See above.
- Q. For the generic secondary designated offence, should the decision on mode of trial determine whether an order can be made?**
- A. See above.
- Q. Should there be only one list and, if so, what should the test be for the making of a Nddb order?**
- A. See above.
- Q. Should the making of a DNA data bank order be automatic consequence of conviction of a designated offence?**
- A. See above.
- Q. Should a DNA sample be taken from suspects at the time of arrest/charge?**
- A. The post-conviction taking of DNA samples is consistent with the Canadian Charter of Rights and Freedoms. At this time, the AC continues to support the taking of DNA samples only after conviction.
- Q. If so, what provision, if any, should be made for removing the profile from the data bank?**
- A. N/A
- Q. Should the Nddb be able to transmit the identity of a convicted offender when it has concluded that the CSI sample might be derived from a close relative of the person in the COI?**
- A. The AC recognizes the investigative value of DNA data collections and that, in some instances, results of the search process may indicate that a close biological relative of someone in the Nddb may be a likely suspect. The AC recommends that this potentially key investigative information be submitted to the appropriate law enforcement officer, provided that stringent operational procedures be applied to avoid intrusive practices. In such instances there should be a careful coordination between the actions of the Nddb personnel and investigators. This should be done in order to appropriately limit the intrusion upon the privacy of uninvolved parties.
- Q. More generally, should the Nddb be authorized to assist the investigation of offences by doing kinship analysis as the National DNA Data Bank in the UK run by the Forensic Science Services does?**
- A. See above.
- Q. Should the Nddb be able to upload DNA profiles from biological samples obtained from volunteers and victims of crimes?**

A. The AC recognizes the benefit to law enforcement and that this potential inclusion can help an investigation by linking evidence through serial cases while enabling safeguards to exonerate and potentially exclude. The AC has no objection to uploading such DNA profiles provided that procedures are put in place to ensure the informed consent of volunteers giving the samples.

Q. What safeguards should there be to ensure that the consent is informed and not coerced?

A. A written consent form should be developed for this purpose to assure that those providing voluntary samples do so with full understanding of the consequences of the use of the sample and of their rights to request sample destruction and removal from the Nddb.

Q. Should the DNA profiles of young persons be removed from the Data Bank when their youth record is destroyed under the Youth Criminal Justice Act?

A. It is the AC's opinion that if judicial discretion is allowed to continue in relation to the taking of DNA samples from youthful offenders, the profile and sample should not be removed from the Nddb when the Criminal Record is destroyed under the Youth Criminal Justice Act. This is consistent with the retention policy for fingerprints.

Q. Should a judge take into account the nature and circumstances of an offence when determining whether to make a DNA data bank order against a young person who has been found guilty of a designated offence?

A. Yes.

Q. How should the data bank be involved and what steps should be taken to conserve the evidence that is loaded locally into the national CSI?

A. Policies concerning the retention of exhibits analyzed by regional forensic laboratories in the various provinces do not fall under the jurisdiction of the Nddb. Policies concerning which Crime Scene DNA profiles, developed by those laboratories, can be uploaded to the Nddb CSI are contained within the DNA Identification Act.

Q. What other steps should be taken to ensure that the Nddb's potential use as an exoneration tool be fully realized?

A. The AC advises that biological sample cards held in the Nddb could be made available under special conditions in order to support a post-conviction review in exoneration procedures where there is no other recourse. This practice would need to be developed with considerations for privacy and security and with the understanding that it represents a last resort for exclusionary purposes. The AC understands that the samples are currently maintained indefinitely and recommends that this practice be continued.

Q. Should the Nddb CSI profiles be routinely compared to international databases?

A. The AC recognizes an advantage to the ability to routinely perform such searches of CSI profiles against those held in DNA databases in other countries.

- Q. Under what conditions should other countries be able to search their DNA profiles against the Nddb COI and CSI?**
- A. The AC is aware of the international nature of some crimes and of the need to work closely with other nations to protect the safety of Canadians here and abroad. Reciprocal international data sharing agreements and precautions are already in place to help assure that human rights and privacy interests are protected. However, international practices differ widely and Canada processes individual requests for data sharing according to the agreements and understandings governing such requests.
- Q. Should the above reciprocal DNA data sharing be performed on-line using electronic linkages?**
- A. The AC recommends that requests for on-line electronic DNA profile searches be coordinated internationally to ensure compliance with existing Interpol agreements and the current intent and practices developed for the Nddb.

Privacy Audit and Review

In preparation for the five year review, the AC requested and received a presentation from officials representing the Audit and Review Branch of the Office of the Privacy Commissioner of Canada (OPC). This branch conducts independent and objective audits and reviews of government departments' personal information management systems for the purpose of promoting compliance with applicable legislation, policies and standards and improving privacy practices and accountability.

The AC was advised that Treasury Board initiated a policy regarding Privacy Impact Assessments (PIAs) in May 2002. However, while the PIA framework may have some utility in assessing Nddb compliance with privacy best practice principles, the PIA Policy deals with prospective programs, not existing ones. Only if the existing management framework changes, might the PIA Policy be engaged. Since the Nddb has been up and running for more than six years, the best vehicle for assessing compliance with government law and policy with respect to privacy is a privacy audit. The OPC officials indicated they would work with the AC to understand what particular matters the AC would like the OPC to consider when undertaking an independent examination of the Nddb. Following the December meeting, the AC recommended that the RCMP formally request a privacy audit of the Nddb. The request has been approved and it is the AC's understanding that the audit is tentatively scheduled to take place during the latter part of Fiscal Year 2006/2007. The AC may play a role in the process by commenting on the scope of the audit, the preliminary results and the final report. While the process will probably occur after the five year parliamentary review, it is the opinion of the AC that the review will be timely in view of the ongoing amendments to the DNA Identification Act and related legislation.

Retroactive Sample Collection

Bill C-13, which passed in Parliament on May 19, 2005, expands the provisions for collecting samples from offenders convicted before June 30th, 2000. The Bill amended section 487.055 of the Criminal Code which sets out the procedure for retroactive sampling of offenders who are still under sentence. The amendments, which came into force on Royal Assent, added three historical sexual offences (indecent assault – female; indecent assault – male; and gross indecency) and the offence of manslaughter to the list of offences that make an offender eligible for DNA sampling and made persons who had been declared

a dangerous sexual offender subject to the retroactive scheme. It also removed the recidivism requirements from the legislation, i.e., one conviction now qualifies whereas the original Act required two convictions. While the original DNA Identification Act proclaimed on June 30, 2000, resulted in the retroactive sampling of 1,855 convicted offenders, the recent amendments have added 4,010 new qualifying retroactive offenders to be sampled.

The Bill C-13 retroactive authorization amendments were proclaimed in force just prior to the expiration of Karla Homolka's sentence for manslaughter. The sample collection process involves a complex series of criminal history reviews. Numerous checks are made to ensure that the correct individual is sampled in accordance with the legislation. The lengthy and stringent process to prepare and process an application package was reviewed. To date, more than 1,300 DNA sample requests have been forwarded to the provincial Attorneys General, up from 500 in December 2005. Notably, more than 399 files have been concluded as of June 2006. Challenges such as warrant expiry dates, jurisdiction responsibility, and offenders on witness protection programs have been resolved. The National DNA Retroactive Collection Project is proceeding in a timely manner and functioning ahead of schedule. It is projected to take a minimum of five years to complete the collection process.

R. v. Rodgers, 2006 SCC 15

In a related issue, the effect of the recent Supreme Court of Canada decision in R. v. Rodgers was reviewed by the AC. The decision upheld the constitutionality of the retroactive ex parte application procedure in a four to three split decision. It was drawn to the attention of AC that the majority decision identified the establishment, by regulation, of the NDDA AC, its composition and duties, as one of the safeguards in place that are aimed at protecting the informational privacy of individuals as set out in the principles of the DNA Identification Act in section 4. Since the decision of the Supreme Court of Canada is binding on the lower courts, any future applications for retroactive authorizations should be able to proceed on an ex parte basis which should assist the efficiency of the retroactive collection process.

Training Program

During a June 2006 meeting in Ottawa, the AC reviewed the progress of the NDDA Training Program which was designed and implemented prior to the opening of the NDDA 6 years ago. The purpose of the program is to train police officers across Canada on how to properly utilize sample kits to collect DNA samples. Thousands of police officers have received the training since the program commenced. In 2005, the Training Section visited 123 RCMP Detachments/Units, 11 municipal police services, three military police service detachments and 10 other groups (Legal Community, Government, DOJ, CEGEPS and Police Academies). More than 600 individuals received training. Training in 2006 will include police officers in six Provinces and training facilitators at the RCMP Training Academy in Regina. Following the proclamation of DNA legislation amendments, additional sessions will include a provincial DNA Coordinator's workshop and a conference with the Territorial and Provincial chief Crown Prosecutors. In view of ongoing promotions, transfers and retirements in police forces across Canada, the AC continues to encourage the RCMP to maintain this vital program as a priority in order to ensure that the number of DNA trained field police officers across the country does not decline.

Governance of the NDDB

The AC has commented upon the existing governance structure of the NDDB within the RCMP Forensic Laboratory Organization on several occasions during the past five years. From implementation to the present, the NDDB has been structured under a branch level Officer (O/c NDDB) reporting to the Director General of the RCMP Forensic Laboratories. The managers of the 6 RCMP Forensic Laboratory sites and the Program Manager responsible for Biology Operations report to the Director, Investigation and Enforcement Support within the Forensic Science and Identification Services of the RCMP. Since the NDDB is a NPS data repository operating under very stringent privacy and security standards, which provides services to all police agencies across Canada in a manner similar to the National Fingerprint and Criminal Records repositories, it has been the view of the AC that the NDDB should be organizationally situated at arms length from the RCMP Regional Laboratory operations management chain. The views of the AC on this issue are noted in its response to the Five Year Review consultation document contained earlier in this report. The AC is pleased to note that the Senior Executive of the RCMP recently approved a realignment of Forensic Laboratory Services (FLS) with Information and Identification Services (I&IS). The new NPS service line will be called **Forensic Science and Identification Services (FS&IS)**. One of the main goals for the realignment will be to maximize operational efficiencies and reduce duplication of administration and support services. The NDDB operations will remain as currently deployed but will now fall under an accountability line distinct from that of the Manager of Forensic Laboratory Operations. Dr. Ron Fourney has been appointed the Director of Research and Development for FS&IS with the additional responsibility of special advisor to the NDDB. It is the view of the AC that the reorganization is both timely and progressive.

Measurement of Success

For several years, the AC, working with the RCMP, PSEPC and DOJ, has discussed the need to develop tools and metrics to assess the overall effectiveness of the NDDB. At present, the NDDB maintains cold hit statistics, crime scene matches, cases assisted and associative links between secondary and primary offences. However, it is extremely difficult to obtain a full statistical evaluation of cases from the crime scene through the local laboratory, the NDDB, the police department investigation and ultimately the courts. AC member, Dr. Frederick Bieber, Harvard University, recently published an extremely informative article on this issue in the Journal of Law, Medicine and Ethics. His participation in discussions of this issue at the meetings of the AC has been extremely helpful. In response to a request by the AC, funding has been approved to commence a joint study by PSEPC, DOJ and the RCMP to assess the effectiveness of the NDDB by researching the outcome of matches and eliminations made in the NDDB. It is proposed that a statistically significant number of cases, randomly selected, be reviewed from start to finish. This will require an enquiry line involving police departments, regional forensic laboratories, CPIC and Criminal Records, the NDDB itself and provincial prosecutors' offices. While the AC anticipates that this research will provide a more accurate direct indication of the effectiveness of the NDDB than is now available, it would be extremely difficult to measure issues such as the financial benefits to society when a NDDB match or elimination either shortens or redirects an investigation. Similarly, the personal relief to a citizen suspected of a crime and subsequently eliminated by DNA is an immeasurable social benefit.

Missing Persons Index

The AC has followed the progress of discussions between PSEPC and the Federal, Provincial and Territorial (FTP) Working Group in relation to the establishment of a National Missing Persons Index (MPI). The AC continues to support the establishment of an MPI for Canada as noted in our last Annual Report and are of the view that it should be National in nature and associated with the NDDB. The AC notes as well that the FTP Working Group is supportive of a National MPI system.

The AC understands that the Working Group is presently developing a proposed model to be presented to the FTP Ministers in the Fall of 2006.

Familial Searching

The AC continues to monitor and keep abreast of the issues pertaining to familial searching in various jurisdictions. The issue is proving to be both interesting and controversial. Dr. Frederick Bieber has written a short article on this subject which is attached to this report. His comments represent the consensus of the majority of the AC members, but do not however, necessarily reflect the position of the Office of the Privacy Commissioner of Canada (OPC).

Conclusion

In conclusion, the AC has continued to monitor the operations of the NDDB during the past six years through regular meetings and personal visits to the NDDB itself. The AC is of the opinion that the NDDB is being managed and operated efficiently and effectively within the provisions of the DNA Identification Act and associated Regulations. While the full provisions of Bill C-13 have not yet come into force, the AC is of the view that the legislation is timely and progressive.

Family/Kinship Searching - Potential use in Canada's National DNA Data Bank

To date, use of the National DNA Data Bank of Canada has consisted of comparisons of crime scene DNA profiles to those in the offender or crime scene indices within the data bank. More recently it has been shown that novel searching methods could allow expanded use to aid in the identification of possible criminal suspects who may be closely related to known offenders. Selective use of these novel searching methods could enhance public safety and collective security. This can be accomplished even when incomplete or "less than perfect" DNA profile matches are found after comparing crime scene evidence to known offenders in the national offender DNA data bank.

Dr. Frederick R. Bieber and colleagues have demonstrated that a substantial number of criminal investigations could be aided by use of genetic kinship analysis of DNA databases (Science, May 11, 2006). Such analyses would allow investigators to identify those already in the database, who themselves don't perfectly match the crime scene evidence, but who might be very closely related to the real crime perpetrator. As discussed in their Science paper, formal genetic kinship analysis followed by Y-chromosome STR typing of candidate and crime scene samples would be an effective way to generate a narrow list of individuals potentially related to the crime scene evidence. Their Science paper also addresses various legal, privacy, and policy considerations related to "family searching."



While less sophisticated methods also have been used to identify individuals who are closely related to crime perpetrators (e.g., rare allele searching, direct allele count comparisons), formal likelihood ratio analysis would be the most efficient and would reduce the chance for false leads. These likelihood ratio methods are the very same methods used successfully in humanitarian reunification of recovered remains from the Swiss Air plane crash near Peggy's Cove, NS, the September 11, 2001 terrorist attacks in the US, and of those remains recovered after hurricanes Katrina and Rita.

If a decision were made to expand the utility of the National DNA Data Bank to permit the efficient use of kinship analysis for family searching, modifications of existing software would be necessary as existing software is inadequate to perform these kinship searches. Attempts to identify relatives with existing search algorithms would fail to identify certain potential relatives, would fail to identify all reasonable candidate profiles, and could generate many false leads, thus unnecessarily imposing upon individual privacy and wasting valuable investigative time.

However, many investigations could benefit from the use of various "family searching methods" in cases where criminals have close relatives who have been convicted of crimes that made them eligible for inclusion in the National DNA Data Bank. In its most simple form, investigation of relatives occurs after recognition that DNA from a crime scene sample very closely, but not completely, matches the profile of an individual in the Convicted Offender Index.

Various methods for searching for relatives regularly occur in Europe and New Zealand and have been applied successfully in several U.S. states. The U.K. reportedly has already had success in over a dozen of slightly more than 100 instances in which fairly crude family searching methods have been used to identify potential suspects.

It is the view of the NDDB Advisory Committee that Canada's National DNA Data Bank should remain near the leading edge of scientific and technical innovation, but at the same time, it must respect fundamental values such as protection of individual privacy and security of data as prescribed by Canada's current legislation. Discussions with privacy experts, DOJ and experienced prosecutors will be required to determine if there are substantive Charter or Constitutional issues which would prevent the implementation of Family searching in the National DNA Data Bank. The NDDB Advisory Committee will pursue this issue in some detail as a priority during the coming year prior to making any recommendations to the Commissioner.

RICHARD A. BERGMAN, CHAIRPERSON REPRESENTATIVE OF THE POLICE COMMUNITY

Following 35 years of distinguished service with the RCMP, Richard Bergman retired from active police service in 1997. During his career, he served in Manitoba, Saskatchewan, British Columbia, Ontario and Atlantic Canada. Among his many significant career appointments, he served as Commanding Officer of the RCMP in Manitoba, the Director, RCMP Forensic Laboratories, Deputy Commissioner, National Police Services, and Deputy Commissioner, Atlantic Region. It was under his direction, as the Director of Forensic Laboratories, that the RCMP initiated their DNA program. Mr. Bergman graduated from the University of Saskatchewan in 1972 with a B.Sc. (Honours) and a M.Sc (Biochemistry) in 1974. He is also a graduate of the Career Assignment Program, Government of Canada. Mr. Bergman is a member of a number of professional associations, and the recipient of a number of several distinguished awards. He has published and co-authored a number of publications relating to legal, police and science issues. Mr. Bergman has served as Chair of the National DNA Data Bank Advisory Committee since its establishment in May, 2000.

THE HONOURABLE PETER CORY, C.C., C.D., Q.C. REPRESENTING LAW

The Honourable Peter Cory was a pilot in the RCAF and served overseas with 6th Bomber Group. The Honourable Peter Cory received a B.A. from the University of Western Ontario (Assumption) in 1947. He graduated from Osgoode Hall Law School in 1950. He was called to the Ontario Bar in 1950. He was appointed Q.C. in 1963. He practised law with Holden, Murdoch. He was elected a Bencher of the Law Society of Upper Canada in 1971. He was President of the Advocates' Society; Chairman of the Ontario Civil Liberties Section of the Canadian Bar Association; President of the County of York Law Association; and a Director of the Canadian Bar Association. He was appointed as Chancellor of York University in June 2004.

He was appointed to the Supreme Court of Ontario High Court in 1974; Appointed to the Ontario Court of Appeal in 1981. He was appointed to the Supreme Court of Canada, February 1, 1989 and retired in June, 1999. The Honourable Peter Cory is Honorary Colonel of 426 (T) Training Squadron and an Honorary Fellow of the American College of Trial Lawyers.

The Honourable Peter Cory is currently mentoring at the Federal Department of Justice and conducting arbitration and mediation work at the Osler ADR Centre.

Since 1999 the Honourable Peter Cory has been appointed and is continuing as a member of the DNA Data Bank Advisory Committee. He was appointed Commissioner for the Province of Ontario to conduct a study regarding paralegals. He was appointed Commissioner to study the qualifications, salary and pensions of Military Judges. He was appointed Commissioner by the Province of Manitoba to investigate the reasons for the wrongful conviction of Thomas Sophonow for murder and to fix the compensation payable to him arising from his wrongful conviction and imprisonment. He was recently appointed Commissioner by the governments of the United Kingdom and the Republic of Ireland to investigate and report with regard to six high profile murder cases which are significant to all the parties involved in the peace process in Northern Ireland. He has completed a study for the Province of Ontario pertaining to the best method of auditing the medical service accountants of the doctors of the Province.

DR. RONALD M. FOURNEY, O.O.M. REPRESENTING THE NATIONAL DNA DATA BANK

Dr. Fourney received his Ph.D. in Biochemistry and conducted post-doctoral studies in molecular basis of cancer predisposition as a National Cancer Institute of Canada and Alberta Cancer Board Research Fellow. He joined the RCMP as a civilian member and molecular genetics specialist in 1988. Dr. Fourney is a founding member of the RCMP DNA program and has been instrumental in the development and implementation of forensic DNA typing for Canada. He represents the RCMP on numerous national and international committees tasked with the development of DNA identification methods for forensic human identification. He has also played key roles in numerous investigations including organization and management of the SR111 DNA Typing task force for the DNA identification of the victims of the Swissair Flight 111 aircraft disaster. He has continued his interest in enhancing forensic DNA technology and has specialized in fluorescent Short Tandem Repeat detection analysis, robotic automation and comprehensive strategic planning for DNA data banks and high throughput DNA analysis. Dr. Fourney is closely involved with the privacy and security issues of DNA human identification and was a key content expert in the design of the Canadian DNA Data Bank Legislation.

Dr. Fourney is currently the Officer in Charge of the National Services and Research Branch and Canada's National DNA Data Bank which fall under the Forensic Science and Identification Services (FS&IS) of the RCMP National Police Services. His new role includes the research and development of science and technologies to aid in national criminal investigations and the advancement of forensic applications within the National Police Services, as well as internationally, through cooperative partnerships. He is a member of the editorial boards for the Journal of BioTechniques and The Journal of Forensic Sciences. He has an academic cross appointment as adjunct professor in the Department of Biology, Carleton University (Ottawa-Carleton Institute of Biology).

DR. FREDERICK R. BIEBER BIO-MEDICAL ETHICS SPECIALIST

Born and raised in Saskatchewan, Frederick R. Bieber earned a Ph.D. degree in Human Genetics at the Medical College of Virginia. After postdoctoral research fellowships in medical genetics and pathology at the Massachusetts General Hospital in Boston he joined the Faculty of Medicine at Harvard University, where he is now Associate Professor of Pathology. Dr. Bieber is a medical geneticist at Brigham and Women's Hospital and has a long-standing interest in forensic medicine and public safety - having been appointed to serve on advisory boards of both the Federal Bureau of Investigation and the U.S. Department of Defense and the Department of Forensic Science of the Commonwealth of Virginia. He serves as a forensic and statistical consultant to numerous law enforcement and public defender groups and to the Connecticut State Police Forensic Science Laboratory. He was appointed to serve on the U.S. Department of Justice Kinship and Data Analysis Panel to assist in the DNA identifications of those lost in the World Trade Center attacks on September 11, 2001, and by the Louisiana State Police to assist with identification of victims of Hurricanes Katrina and Rita. Dr. Bieber has received numerous honor and awards, including Distinguished Service Awards from the Massachusetts District Attorney's Association and the Massachusetts House of Representatives, and the Public Service Award from the Massachusetts State Police for his pro bono public service. Dr. Bieber is a commissioned officer in the United States Army Reserve and a sworn reserve Deputy Sheriff in Middlesex County, Massachusetts.

GISELE COTE-HARPER, O.C., Q.C. HUMAN RIGHTS SPECIALIST

Gisèle Côté-Harper graduated from Laval University (B.A.(ès arts); LL.L.) and Harvard University (LL.M.). She is currently a Barrister and a professor at the Faculty of Law, Université Laval.

After having held the position of Associate Dean, Professor Côté-Harper was successively appointed to the Canadian Human Rights Tribunal, the Quebec Human Rights Commission and the RCMP Public Complaints Commission. She was also elected as an independent expert on the U.N. Human Rights Committee.

In 1987, Professor Côté-Harper has co-authored a report with respect to the creation of an international institution that was later established by legislation. She was then asked to act from 1990-1996 as Founding Chair of the International Centre for Human Rights and Democratic Development (Rights and Democracy). In 2000, she was appointed to the International Commission on Intervention and State Sovereignty (ICISS). The Commission report launched at the United Nations is entitled The Responsibility to Protect. Among her many publications, Gisèle Côté-Harper is the co-author of the *Traité de droit pénal canadien* (4th Ed.), 1998. She has also been invited to serve as Director on international and national boards and participate, as a delegate, in various U.N. conferences and symposia.

Professor Côté-Harper was appointed Queen's Counsel in 1987. In 1995, the United Nations Association of Canada recognized her contribution as a legal expert on national and international human rights issues by awarding her the Lester-B. Pearson Medal. She was named Officer of the Order of Canada in 1997. In 1998, she was awarded the Quebec Bar Medal and, in 2002, the Golden Jubilee Medal.

DR. WILLIAM S. DAVIDSON MEDICAL GENETICS SPECIALIST

After graduating with a BSc from Edinburgh University, Scotland, Willie Davidson emigrated to Canada and earned a PhD in Biochemistry from Queens University. He then carried out research at the University of California at Berkeley as an MRC Post-doctoral Fellow and then at the University of Connecticut Health Center at Farmington as an MRC Centennial Fellow. In 1981 he joined the Biochemistry Department at Memorial University of Newfoundland where he remained for eighteen years rising through the academic ranks to Professor. During this period he served as Acting Chair of the Biochemistry Department, Associate Dean of Science (Research), and Acting Dean of Science. In 1999 he moved to Simon Fraser University as Dean of Science, a position he held until 2003, when he returned to the ranks as Professor of Molecular Biology and Biochemistry. Dr. Davidson's research interests are many and diverse. He has published widely in the areas of molecular evolution, population genetics, genomics, human genetics and hereditary diseases that affect the Newfoundland population, particularly those causing loss of sight or kidney function. His current research projects include the Atlantic salmon genome project and brood stock development of Arctic charr. He has served on many national and international committees and at present is a member of Genome Canada's Scientific and Industry Advisory Committee.

RAYMOND D'AOUST OFFICE OF THE PRIVACY COMMISSIONER OF CANADA

Effective September 2, 2003, Raymond D'Aoust was appointed Assistant Privacy Commissioner of Canada with primary responsibility for the Privacy Act, the federal public sector privacy law.

Prior to this and since November 1999, Raymond worked for the Canadian Centre for Management Development (CCMD), as A/Director General, Career Development Branch. The Branch is responsible for designing and delivering the educational components of executive and management development programs such as the Management Trainee Program, the Career Assignment Program (CAP), the Direxion program and the Accelerated Executive Development Program (AEXDP). His portfolio also included learning programs and events for Deputies and Assistant Deputy Ministers.

Prior to leading Career Development, Raymond was Director General, Research at CCMD. He was responsible for the long-term research program on Governance as well as for applied research on organizational learning and public sector reform in addition to assuming management responsibility for the Research Branch.

Raymond has more than twenty years of experience in the Canadian government in areas such as program evaluation, review, policy, public consultation, strategic planning, business planning, quality management, technology management and research in several departments and agencies.

Raymond was a part-time teacher at Concordia University and delivered training to federal public servants on several occasions. He studied in political sociology and advanced research methods at Université Laval (B.A.), Ottawa University (M.A.) and Université du Québec à Montréal(doctoral studies).

DR. GEORGE R. CARMODY, VICE-CHAIRPERSON POPULATION BIOLOGY SPECIALIST

Beginning a career in academia upon graduation from Columbia University (Chemistry), Dr. Carmody completed his Ph.D. in Zoology from the same institution. Subsequently, he was a postdoctoral fellow in population biology at the University of Chicago, before joining Carleton University in 1969 and becoming a Canadian citizen, Dr. Carmody has been an Assistant Professor, Associate Professor, Associate Dean of Science, Chair, Integrated Science Studies, and is currently an Adjunct Professor of Biology at Carleton University. During sabbatical leaves from Carleton he has been a senior fellow (genetics) at the University of Nottingham, a visiting researcher at the National Institute of Environmental Health Sciences and a visiting professor at the University of Hawaii and the University of Texas. Dr. Carmody is a member of a number of professional societies, has participated in the publication of several dozen scientific publications, testified in numerous DNA related court cases in Canada, and during his distinguished career, has presented briefings at numerous lectures and seminars around the world. He is a member of the N.Y. State DNA Subcommission, the U.S Department of Justice Kinship and Data Analysis Panel and the Advisory Board for the Forensic Science Program at Trent University. Dr. Carmody is recognized in the scientific and legal communities as an expert in population genetics and statistics as applied to forensic applications.

The MANDATE Of the The National DNA Data Bank Advisory Committee



L-R: Raymond D'Aoust, Dr. George Carmody, Gisèle Côté-Harper, The Honourable Peter Cory, Dr. Ron Fourney, Dr. Fred Bieber, Dr. Willie Davidson
Sitting: Mr. Richard Bergman, Chair

The Committee was established pursuant to Section 12 of the *DNA Identification Act* through the annexed *Data Bank Advisory Committee Regulations*. The Regulations were enacted on May 8, 2000, several months before the proclamation of the *DNA Identification Act* and the *DNA Identification Regulations*, which occurred on June 30, 2000.

The establishment of an Advisory Committee was recommended by the *Standing Senate Committee on Legal and Constitutional Affairs* in its Sixteenth Report (December 8, 1998) wherein the need for an independent advisory committee was deemed necessary to contribute to the effective and efficient operation of the Data Bank by providing expert advice to the RCMP Commissioner.

Appointed by the Solicitor General of Canada, the Committee functions as an independent body to assist the Commissioner in ensuring that the Data Bank operates in compliance with the legislation and regulations. In addition, it reviews the methods used to issue notifications, transmit information and convey and store samples. Other functions of interest include sampling processes and sample integrity, scientific integrity, genetic privacy, analytical procedures, international information sharing protocols, sample re-analysis and the DNA profile format itself.

***Subject Matter Experts and Guest Speakers to the National DNA Data Bank
Advisory Committee April 1, 2005 to March 31, 2006***

The National DNA Data Bank Advisory Committee wishes to thank all those who have provided advice, assistance, research and support thus contributing to the betterment, privacy, security and safety of all Canadians:

David Bird	Legal Counsel, RCMP
Sylvain Lalonde	CODIS Administrator, NDDB, FS&IS
Peter Martin	Deputy Commissioner, National Police Services
Joseph L. Buckle	Assistant Commissioner FS&IS
Karen Sallows	Public Safety and Emergency Preparedness (PSEPC)
Alison Rutherford	(PSEPC)
Geneviève Sirois	(PSEPC)
Sylvia MacKenzie	(PSEPC)
Isabelle Trudel	Program Manager NDDB
Kathy Bowen	Manager, DNA Analysis (NDDB)
Sylvia Trudel	DNA Training and Collections Officer, NDDB
Mike O'Donnell	Retroactive Collection Project, NDDB
Greg Yost	Counsel, Criminal Law Policy Section, DOJ
Davide Pisanu	Canadian International Development Agency (CIDA)
Trevor Shaw	Office of the Privacy Commissioner (OPC)
Stuart Bloomfield	OPC
Dr. Ray Prime	Director, Centre of Forensic Science (CFS)
Detective Bob Strathdee	OPP/CFS Advisory Committee
Detective Ross Bingley	OPP/CFS Advisory Committee
Gerry Webb	OPP/CFS Advisory Committee
Det/Ins. Phil George	OPP/CFS Advisory Committee
Maryellen Hurman	CFS Advisory Committee
Chief Vincent Bevan	CFS Advisory Committee
Michal Fairburn	CFS Advisory Committee
Justice George Ferguson	CFS Advisory Committee
Doug Lucas	CFS Advisory Committee
Mr. Brian McGuire	CFS Advisory Committee
Carol Peclet	CFS Advisory Committee
Dr. James Young	CFS Advisory Committee
Chief Derek McElveney	CFS Advisory Committee
Ron Bain	CFS Advisory Committee
Fred Braley	CFS Advisory Committee
Glenn Murray Chair	CFS Advisory Committee
Kim Johnston	CFS
Lois Stoeber	CFS
Roger Frappier	CFS
Cathy Cooper	CFS
Stephanie Reilander	CFS
Jonathan Newman	CFS
Alexander Welsh	CFS
Brian Peck	CFS
Andrew Greenfield	CFS
Cecilia Hageman	CFS
Irene Thruston	CFS



Financial Report 2005-2006

*National DNA Data Bank Advisory Committee
Annual Costs April 1, 2005 - March 31, 2006*

Date of Meeting	Total Expenditure	Budget
2005, October - Toronto	\$20,755.00	\$50,000
2005, November - Ottawa	\$20,344.00	
Translation Annual Report	\$ \$899.00	
Publication Annual Report	\$ N/C	
Total	\$41,998.00	
Balance	\$ 8,002.00	



